Abstract of the Disclosure

A walk aerator comprises a frame supported by a plurality of ground engaging wheels, the frame carrying a coring head having a plurality of side-by-side tine assemblies. The wheels define a wheelbase which is substantially equal to or less than the width of a coring swath and the wheels are located in advance of the coring head to keep the wheels from passing over the holes or soil cores left in any preceding coring swathes formed by the aerator. The vertical position of the coring head is adjustable up and down as the ground contour changes to keep hole depth substantially constant. The tine assemblies are reciprocated by a single crankshaft driven by a single pulley, the crankshaft being assembled from multiple crank arms that are splined and bolted together. Sealed bearings connect drive arms that drive the tine assemblies to the crankshaft. The crankshaft can be disassembled to allow the sealed drive arm bearings to be replaced. Integral core deflectors are used on the drive arms. A connecting link extending across each drive arm is used to connect each drive arm to the coring head to decrease the coring head depth.